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ABSTRACT

A study was made to determine the impact of a 14-week alcohol education program on the knowledge and attitudes of a self-selected group of teachers in a Massachusetts school system. An assumption underlying the curriculum studied was that, with appropriate knowledge and attitudes about problem drinking, teachers might intervene early with students affected with a drinking problem. A quasi-experimental design was used to evaluate the program's effectiveness by analyzing how exposure to the program and selected demographic variables affected the knowledge and attitudes of the participants. The 33 participants who attended the inservice course and completed the post-test questionnaire made up the study population. It was concluded that short term gains in knowledge and positive attitudes were accounted for by program effects. The 18 hypotheses which formed the basis for the program's content are discussed and the research methodology used in the study is described in detail. The instruments used in the study are appended. (JD)

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EVALUATION OF AN ALCOHOL EDUCATION PROGRAM FOR TEACHERS:

A CASE STUDY

Dr. Genevieve Fitzpatrick
Principal Investigator
August 1983

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ABSTRACT

Evaluation of an Alcohol Education Program
For Teachers: A Case Study

The primary purpose of this study was to determine the impact of a specific alcohol education program of 14 weeks duration on the knowledge and attitudes of a self-selected group of elementary, middle and high school teachers in a Massachusetts public school system. An assumption underlying the curriculum studied is that with appropriate knowledge and attitudes about problem drinking, teachers might act as important early intervenors with students so affected. A quasi-experimental design was used to evaluate program effectiveness by analyzing how exposure to the teacher education program and selected demographic variables affect knowledge and attitude of program and participants. Thirty-six teachers volunteered to participate in the study. Thirty-three completed the post-test questionnaire and comprised the final study population. The program evaluated was an in-service education course sponsored by Bridgewater State College which awarded three graduate credits to participants for successfully completing the course. A separate faculty evaluation was conducted by the investigator using college faculty evaluation forms. Process evaluation was incorporated into a site visit made by the evaluator. It is concluded that with this group of self-selected participants, at least short term gains in knowledge were accounted for by program effects. Demographic variables such as age and sex account for some gains. The postulated effects of a highly acclaimed faculty member on outcomes are discussed. Several recommendations are made in respect to design improvements and development of psychometric scales that reliably reflect attitudes for future studies.

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Mr. John Houlihan is a well known regional expert in the computer package (S.P.S.S.) used for data analysis in this study. Mr. Houlihan volunteered his services for a considerable period of time much beyond the minimal evaluation fee available to him. As is his usual practice Mr. Houlihan helped to plot an appropriate data analysis strategy and conducted a computer analysis that made the best use of collected data. To Mr. Houlihan, a full time computer analyst and expert out of the Boston University computer center, sincere appreciation for his scholarly effort in the evaluation process.

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Thanks to Myrtle Buron whose typing skills always accomplish the impossible: translating my often illegible written text into a comprehensive and credible document.

Signed: Mr Lawrence Fitzpatrick

Date: July, 1983

EVALUATION OF AN ALCOHOL EDUCATION PROGRAM FOR TEACHERS: A CASE STUDY

Introduction

Problem drinking is pervasive in modern American society. Official statistics suggest that approximately 100 million Americans might be classified as non-problem drinkers while some 10 million Americans are estimated to be problem drinkers (NIAA, Treating Alcoholism, p.2, 1982). While alcoholism is no respector of age, sex, social class or other demographic variables, both non-official statistics from surveys and studies (CASPAR mimeos 1979-1982) as well as official statistics from the U.S. Health and U.S. Justice Systems (NIAA, 1981) suggest that alcohol related behaviors are becoming a particularly worrisome feature of growing up in America. The U.S. Department of Health and Human Services notes that: "Fifty percent of high school students drink in cars and about one out of four reports driving after having had 'a good bit to drink'." Moreover, traffic accidents, most of which involve drinking drivers, rank number one as a cause of death among teenagers (NIAA, Talking to Your Teenager About Drinking and Driving, p. 2, 1981).

While there is general acknowledgement of the extent of the problem, little agreement exists as to causes and treatment approaches which might best effect positive change

in respect to youthful alcohol abuse. Further, perspectives on the use of the drug alcohol widely differ. For example, Andrew Weil, M.D. suggests an acceptance of the reality of pressures in American Society that preordain youthful experimentation (Weil, 1983). Other clinicians propose a synthesis of multiple factors to explain and treat the problem (Fagan, 1977; Cramer, 1977; Hochhauser, 1980; Ray, 1983). Despite this wide range of clinical and theoretical perspectives, there is consensus among both field and academic based practitioners that educational approaches are the key to successful intervention (CASPAR mimeos, 1978-1983: Porter, 1980; Cramer, 1977: Robins, 1982; Witters & Witters, 1983). In this context, over time, considerable funding has been invested in pilot programs which use teacher training as a prime vehicle for reaching youthful populations through preventive strategies. One such program is the CASPAR curriculum wherein an effort is made to effect change in teacher attitudes and knowledge related to youthful drinking through a problem solving decision making based curriculum. According to CASPAR evaluation studies, some of which are longitudinal in nature, teacher training using the Decisions About Drinking Curriculum of CASPAR accounted for significant changes in teachers' attitudes and knowledge about drinking in general and youthful drinking patterns, in particular. (Teacher Training in Alcohol Education: Changes over 3 years,

DiCicco et al, CASPAR mimeo). Other evaluations support similar gains in teachers and students exposed to prevention and early intervention training and education (Fagan, Rankin, 1977; Fors et al, 1983).

While knowledge defined as a body of accurate facts about alcohol, seems particularly subject to change most studies do suggest that attitudes seem more resistant to change (CASPAR mimeos, 1983; Fors et al, 1983). Yet the CASPAR group and other evaluators reason that teachers may act as a conduit for inaccurate as well as accurate information and through classroom contact may even transmit biases about use of alcohol that will prove counterproductive for their youthful student population (Longitudinal Study, CASPAR mimeo, p. 15). These observations are an additional powerful argument for continued evaluation of the impact of teacher training programs geared to prevention strategies. This report will deal specifically with the findings about attitude and knowledge change derived from a study of a teacher training program in alcohol use/abuse conducted in the Barnstable School System, Massachusetts in 1983. The purpose of the study suggested by a review of the literature is to determine the impact of a specific alcohol education program on the knowledge and attitudes of a self selected group of teachers based at all levels (elementary, middle school, high school) of education in the system. A further

intent of the study is to explore the effects of selected demographic variables on knowledge and attitudes. It may be that an analysis of the impact of these variables provides plausible alternative explanations for knowledge and attitude gains in participants enrolled in the program.

Description of the Program, Program Site B.S.C. Sponsorship

The Barnstable School System is located in Hyannis on Cape Cod, an island community whose teachers represent a stable population with some 85% of them holding tenure status. All teachers enrolled in the program evaluated needed graduate credits as provided by an inservice education program; the teacher evaluation process for this school system requires periodic completion of such courses (Geick, 1983). As part of the inservice education program efforts of Bridgewater State College, the college offered an alcohol education program which met the need of advanced education and granted three graduate credits to Barnstable School System staff.

Professor Barry Bloom was approved as the onsite faculty member responsible for the course. Professor Bloom is a family systems therapist who is experienced in group process and attitude formation techniques as well as therapeutic approaches to alcohol education. Professor Bloom is also a staff member of Lewis Bay Mental Health Associates

of Cape Cod.

The program was designed to be both theoretical, through lecture and discussion approaches, and experiential, through a variety of group exercises. The main program objective is to educate teachers, through heightened awareness of attitudes and information, in early detection, prevention and referral techniques to use in relation to alcohol related problems.

The educational program lasted a full semester (15 weeks) commencing in early February and ending in late May 1983. In the latter part of the program two CASPAR (Cambridge and Somerville Project in Alcohol Rehabilitation) trained teachers conducted a 3 hour presentation on the CASPAR curriculum. Success in the program is defined as significant gains in knowledge and positive attitudes and significant decreases in negative attitudes. (See tables 2 and 3 for items that comprise scales of positive and negative attitudes).

To insure the academic integrity of the program, Dr. Genevieve Fitzpatrick, a Bridgewater State College faculty member, was appointed as evaluator. It was her task to conduct the evaluation which included pretest/posttest administration and a mid-March site visit to monitor the educational process as it was previously described (both didactic and experiential). Mr. Bloom, the approved faculty

member, brought an additional dimension to the program through his fluency with the CASPAR curriculum premises.

Professor Bloom agreed to an intensive interview with Dr. Fitzpatrick at the beginning of the study. During this interview, Professor Bloom offered a number of constructs as thematic representations of the course content. These constructs were operationalized in a number of test items incorporated into the final pretest/posttest instruments appended to this report. For example, Professor Bloom stated that one concept he hoped to have participants internalize is that there is wide variance in the behaviors of offspring of alcoholics. A teacher who understands this notion will likely make the association between student behaviors in the classroom and the possibility of a drinking problem at home. Thus, items 16, 17, 18, 19 were constructed and reflect the continuum of behaviors likely to be seen in the classroom from withdrawal to attention seeking behavior (See summary instrument in appendix). Similarly, other constructs such as perceiving alcohol as a disease are reflected in instrument items. The code book for the study is also appended to this report; knowledge, definition of alcoholism, positive and negative attitude items were combined into scales for data analysis and appear on page one of the code book.

To avoid contamination of the study in the form of "teaching to the test" an unavoidable consequence of knowing

specific test items, Professor Bloom did not see copies of either preliminary or the final instruments until the study was completed, nor was he present at the time of pretest/posttest administration.

Of final note is the opportunity Professor Bloom's course gives us to fill an important gap in the literature. There is a dearth of information about the impact of such teacher training programs on attitudes of participants. CASPAR evaluations have sought to remedy this lack, but the majority of studies focus on the more easily measured knowledge items (Fors, 1983; Robins, 1982). Rarely do evaluation studies report an analysis of the effects of demographic variables such as gender, reported incidence of experience with alcoholism and age as alternative plausible explanations of findings. It should be emphasized that this study is only a modest attempt to evaluate a teacher program in this regard.

The sample is small and self selected so random assignment was not possible. Statistical tests were used where data collected on subjects themselves at pretest serve as the statistical control for posttest measurements of change. A preferable design, one not available for this study, is that of an experiment that uses a control group for comparison purposes. The control group would be a group of teachers <u>not</u> exposed to the treatment (the training course) who are compared to the group of subjects exposed. Prior

exposure and current exposure to other treatments that might influence outcomes cannot be totally ruled out although an attempt to do so through some items was attempted. While the instrument was field tested with a similar population one must acknowledge that some items should be reworked, others added, and some discarded as too ambiguous or not appropriate for reliable scales (as was done in this study) when the study is replicated. Nevertheless, future test-retest reliability through replication might be possible and a funded study in the future might remedy problems posed by scarce resources.*

*Evaluation funds were limited. Dr. Fitzpatrick conducted the study for no fee. Computer consultant, John Houlihan, volunteered hours of computer analysis time and accepted only a minimal evaluation fee. Thus, the study is an attempt to observe the rigor of the research process insofar as possible with minimal financial and paid consultant support.

Hypotheses

The following hypotheses are suggested by the literature search and by the content of the teacher training program as conducted by Professor Bloom. These hypotheses related to: knowledge defined as accurate information; positive attitudes such as a recognition that problem

drinking is amenable to help, that teachers can make a difference in respect to helping problem drinkers or children of problem drinkers, that helping behaviors are important to establishing the teacher as a resource to children with drinking related problems; and negative attitudes which might interfere with teacher student interractions such as limit setting/labelling/scolding students who have problems, rather than using helping behaviors to offer assistance, definition of alcoholism as a disease so that the mind set about alcoholism is not likely to be one that assigns individual blame to the problem drinker and negates helping behaviors.

H1 All subjects enrolled in the course will show statistically significant gains in knowledge.

H2 All subjects enrolled in the course will show statistically significant gains in positive attitudes.

H3 All subjects enrolled in the course will show statistically significant decreases in negative attitudes.

H4 Subjects who report prior exposure to alcohol education show a greater increase in positive attitudes than those who do not.

H5 Subjects who report prior exposure to alcohol education show a greater decrease in negative attitudes than those who do not.

H6 Subjects who report prior exposure to alcohol education show a greater increase in knowledge than those who do not.

H7 Subjects who report family or self as problem drinkers will show less of a positive attitude change than subjects who report no incidence.

H8 Subjects who report family or self as problem drinkers will show less of an increase in knowledge than subjects who report no incidence.

H9 Subjects who report family or self as problem drinkers will show less of a decrease in negative attitude change than subjects who report no incidence.

H10 All subjects enrolled in the program will gain in their ability to identify the range of classroom behaviors exhibited by offspring of alcoholics.

H11 All subjects will demonstrate a significant increase in the acceptance of alcoholism as a disease.

H12 The older the participants in the program, the greater the change in the definition of alcoholism as a disease.

H13 Female participants will show a greater gain in positive attitudes than male participants.

H14 Female participants will show a greater decrease in negative attitudes than male participants.

H15 Female participants will show a greater gain in knowledge than male participants.

H16 Female participants will show a greater gain in assuming responsibility for early intervention than male participants.

H17 Female participants will show a greater gain in defining alcoholism as a disease than male participants.

H18 High school teachers will show a greater change in knowledge and attitudes than elementary and junior high teachers.

Methodology

Description of Program Evaluated

The treatment program is operationalized as a specific teacher training program in alcohol education lasting 14 weeks with the following components:

1. Participation in awareness exercises related to feelings and information about problem drinking,
2. Emphasis on detecting problem drinking in students.
3. Emphasis on early intervention strategies as essential in problem drinking.
4. Emphasis on helping behaviors to build trust between teacher and student.
5. Emphasis on alcoholism as a disease,
6. Emphasis on problem drinking as a family problem.
7. Emphasis on a specific curriculum approach, CASPAR, as an appropriate problem solving decision making tool for teachers in the classroom.
8. Emphasis on identification of resources in the school system.

An assumption underlying the curriculum is that with appropriate knowledge and attitudes about problem drinking, teachers might act as important early intervenors with students so affected.

This quasi experiment is designed to evaluate program effectiveness by analyzing how exposure to the teacher education program affects knowledge and attitudes of program participants. An additional purpose is to analyze the effects of selected demographic variables on knowledge and attitudes. As with any experiment, the basis for documenting these effects is a comparison between two sets of data: that

collected prior to the initiation about subjects of the program (pretest) and that collected at the close of the program. An additional evaluation using the standard tool employed by Bridgewater State College was an evaluation of the faculty member, Professor Bloom, and will be summarized separately in the Summary and Conclusions of this report.

Procedures

In February 1983, prior to the beginning of the study, all interested participants were invited to volunteer for the study. Thirty six individuals agreed to participate and signed the informed consent form in the appendix to this report. Of the original 36 volunteers, 33 completed the posttest questionnaire and comprised the final study population. The pretest and posttest instruments (see appendix) as previously noted included items related to the effects of the program intervention on the following outcome variables; definition of alcoholism as a disease, positive attitudes related to problem drinking, knowledge of alcohol abuse and effects. Some sub-groups were selected out to determine if variables such as gender, occupation and reported family incidence of problem drinking account for gains on the outcome variables. A number of demographic variables were included in addition to those noted including: number of years in position, age, marital status, number and ages of offspring, past history of drinking problems and

education.

Both pretests and posttests were administered to all participants in the same classroom where instruction took place prior to the beginning of the course (Feb. 1983) and at the completion of the course (May 1983). A staff member of the school administered pretests and posttests according to explicit directions (see Appendix). A separate faculty evaluation was conducted by a staff member using the Bridgewater State College protocol and forms as the faculty evaluation is routinely conducted at the college for all graduate courses. A process site visit was made by Dr. Fitzpatrick in March to confirm that the course was being taught as was predicted by the faculty member responsible. The instrument was field tested with a group of teachers enrolled in a graduate level course at Bridgewater State College and revised on the basis of this field test before administration. Table 1 represents the demographic characteristics of the sample. Mr. Geick, Assistant Superintendent of Schools, confirmed that the sample was similar to the total school population of teachers in all the percentages noted. As can be seen from this table, the population is a stable one of older tenured teachers, (personal comm. Mr. Geick, July, 1983).

Table 1

Demographic Characteristics of Sample for Alcohol Education Teacher Training Program Barnstable School System

Demographic Variable	Mean of Sample (n=33)	Percentage
Age	$\bar{X}$ (Mean)=40	48%=27-38 52%=39-61
Sex		51%=M 49%=F
Occupation*		15%=Elementary Teacher 24%=Junior High Teacher 58%=High School Teacher 3%=Staff
Number of Years in Position	$\bar{X}$=15	16%=5 yrs. or less 31%=6-14 yrs. 37%=15-24 13%=25-29 3%=No response
Education		46%=Bachelors Degree 18%=Masters Degree 36%=Post Masters Degree 0%=Doctorate
Marital Status		79%=Married 9%=Single 9%=Divorced 3%=Separated
Number of Children	$\bar{X}$=1.5	33%=None 61%=1-3 6%=4-5
Age of Children	$\bar{X}$=14.5	23%=1-9 63%=10-19 14%=27-34
Drinking Problem History		3%=Yes 3%=No response 94%=No
Recovered Problem Drinker		3%=Yes 88%=No 9%=No response
Family Members with Drinking Problems		60%=Yes 40%=No/Don't Know
Prior Exposure To Alcohol Education Programs 1974-82		37%=Report Prior Exposure 63%=Report No Prior Exposure (Note approximately 50% reports prior exposure through media sources, etc.)

*Total profile in this table matches Secondary School population of teachers in this system.

17.

Interpretation Table 1

The sample described in this table comprises an older (average age 39) group of teachers who are tenured and, on the average, have been in the system as teachers 15 years. Additional demographic information of note is that teachers were required to attend this course as a matter of the school's evaluation system and might be somewhat resistant to information presented or at least not highly motivated to attend voluntarily as they entered into the program. Prior exposure to information about alcoholism as reported by respondents reflects a population relatively insulated from the extensive media and program coverage given to the pervasive problem of alcoholism in current U.S. society; at the most, fifty percent of the population completing the pre-test/posttest instruments reported media exposure to alcohol education while 36% reported exposure to a formal program of the type under study. This latter finding suggests that effects measured in this study for a majority of respondents, was a first time sustained exposure to current thinking about problem drinking. It will be noted in the summary section of this report that, given the assumption that this was a new exposure to much of the course information, the the significant changes in knowledge could be regarded as at least a reflection of short term benefits from the educational program.

Instrument

The final instrument, revised on the basis of the field test as noted previously, consisted of several demographic variables (Table 1) and 47 items designed to measure outcome variables of definition of alcoholism, knowledge, positive attitudes and negative attitudes. Several items were combined into scales to measure these variables (see Appendix). Table 2 reflects internal consistency, and Table 3 reliability of psychometric (attitude) scales derived from the instrument.

Design

The design utilized in this study is the one group pretest/posttest design. This design has many problematic features but is viewed as a useful first step to provide data of interest in respect to gains of participants in measured outcome variables. While the study may show such changes, lack of control is a major problem. Factors other than the educational program may account for these changes despite the identification and analyses of the impact of some factors such as prior exposure to educational programs or printed materials about alcoholism and selected demographic variables such as age, occupation (level of teacher) and sex. The use of this design for a specific organization with an unusually stable, tenured older population of teachers presents an

additional problem of external validity. Clearly, the results are generalizable only to the Barnstable School System, are merely suggestive and must be replicated in other school settings under more controlled conditions.

The exceptional evaluations of Professor Bloom by participants suggests that the factor of teacher student reactivity might be in operation. It may be that the same program, when taught by a teacher who generates a less sanguine evaluation may not be successful at all. This may be particularly true if one considers that the group was likely to be resistant to teaching at the outset and the professor's charismatic effects as a teacher might have accounted for his overwhelming this resistance and increasing the receptivity of participants to information.

Nevertheless, the study's major findings are suggestive at least of overall benefits derived by participants. Moreover, these findings suggest further studies of the process by which change is generated or blocked.

Description of Statistical Procedures

The two tailed probability T test is the major statistical procedure used to analyze the data collected. This test, using pretest scores as the statistical control, examines the differences in mean scores on each test item. Significant gains, losses, or no change in means, then, are plotted in this computer analysis. For this study a

probability level of P=0.05 as usual one employed in the social sciences was employed. In words findings of gains or losses are explained in terms of probability theory: in this case the finding could have happened by chance alone a maximum of only 5 times in a 100. Any finding above .05 is thus deemed NS or not significant.

Use of Qualitative Data-Process Evaluation

A site visit was made in March, 1983 about the mid point of the course and field notes taken at this visit confirm that the course was being taught as predicted with part of the class time devoted to a lecture, discussion dialogue related to problem drinking and the remainder of the time used to engage participants in self awareness exercises related to family systems and other experiential exercises related to attitudes toward problem drinking.

Thus the procedures, sample, instrumentation and research design are much like any quasi experiment conducted in social research in general and program evaluation in particular.

Results of Data Analysis

Results of analysis of data are presented in the following order. First the internal consistency analyses of the attitude scales suggested by data collected with the Alcohol Education Survey instrument are presented. These

reliability analyses were done to confirm that scales contained items closely related to one another. Scales were developed to reflect various outcome measures of exposure to the intervention. These scales include: a scale of knowledge, a scale of alcoholism defined as a disease, a scale of positive attitudes and a scale of negative attitudes. Second, analyses pertaining to the research hypotheses are presented including those that use an independent variable other than the educational program to account for the outcomes. These tables comprise table 2-9.

Table 2**

Item Total Correlations and Coefficient Alpha on Positive Attitudes

Item	Item Total Correlation (n=33)*
1. It is possible to identify problem drinkers early.	0.005
2. Showing concern about behavior.	0.39
3. Teacher willingness to help.	0.61
4. Teacher willing to refer for help.	0.80
5. Teacher will follow up to see how student with drinking problem is doing.	0.77
Coefficient alpha =	0.73

*Each correlation is between the item and total score minus the item.

Explanation Table 2

Table 2 presents the internal consistency reliability information for the positive attitude scale. Included in the

table are the correlations between each item and the total score as well as an overall index of internal consistency, coefficient alpha. All of the item total correlations are positive, and coefficient alpha is 0.73 which is considered satisfactory for a 5 item scale (Nunnally, 1978).

**Some items in the original scale were discarded when a low coefficient using these items indicated the scale was unreliable. The 5 items in table 2 constitute the positive attitude scale that was used in all data analysis pertaining to positive attitudes.

Table 3

Item Total Correlations and Coefficient Alpha on Negative Attitude Scale**

Item	Item Total Correlation (n=33)*
1. Spouse of alcoholic is powerless to help mate (III33)	0.26
2. Setting limits with no offer of help (IV43)	0.58
3. Setting limits by labelling student (IV44) with no offer of help	0.53
Coefficient alpha = 0.61	

Explanation Table 3

Table 3 presents the internal consistency reliability information for the negative attitude scale. Included in the table are the correlations between each item and the total score as well as an overall index of internal consistency,

coefficient alpha. All of the item total correlations are positive and coefficient alpha is 0.61 which is considered adequate for a 3 item scale (Nunnally, 1978).

** As with the positive scale this represents the final scale of negative attitudes used in data analysis.

*Each correlation is between the item and total score minus the item.

Hypotheses Concerning Effects of Educational Program on Over All Knowledge and Attitudes

Table 4 shows effects of the program on overall knowledge and attitudes; the outcome variables for hypotheses 1, 2, 3.

Table 4

Pretest/Posttest Means and Comparisons on Overall Knowledge and Attitudes (n=33)

Variable	Pretest $\bar{X}$	Posttest $\bar{X}$	Gain (+) or Loss (-)	t	p
Knowledge of alcoholism	15.2	21.2	+6.0	+8.37	<.001
Negative attitudes toward alcoholism	4.33	4.6	-0.3	-0.9	NS
Positive attitudes toward alcoholism	11.2	14.09	2.84	4.5	<.001

Interpretation

Hypotheses 1 stated that all subjects enrolled in the course would show statistically significant gains in knowledge. A comparison of means at pretest and posttest does show a

gain; moreover, this gain in knowledge is statistically significant with a probability level below .001.

Hypotheses 2 stated that all subjects enrolled in the course will show statistically significant gains in positive attitudes. The mean scores in positive attitudes show a gain which is statistically significant. The main interpretation of this finding is that all subjects did gain in positive attitudes.

Hypotheses 3 stated that all subjects enrolled in the course will show statistically significant decreases in negative attitudes. According to pretest and posttest comparisons of means, negative attitudes toward alcoholism did not decrease.

In sum, the means for all participants in the study enrolled in the course show significant gains in knowledge and positive attitudes and no mean decrease in negative attitudes. As may be seen from table 9, gender alone might account for a statistically significant increase in negative attitudes. When males and females are compared, males show a statistically significant increase in negative attitudes.

Hypotheses Concerning Effects of Prior Exposure to Alcohol Education on Knowledge and Attitudes

Table 5 shows the effects of exposure (since 1974 up to 1983) to alcohol education (in the form of formal programs or media exposure) on knowledge and attitudes of program participants.

Table 5

Mean Gains/Losses in Knowledge and Attitudes by Whether Subjects Had Prior Exposure to Alcohol Education

Variable	Prior exposure (n=11)	No prior exposure (n=22)	t	p
Change in knowledge	4.0	7.0	2.08	<.05
Change in negative attitudes	0.5	0.2		NS
Change in positive attitudes	2.6	2.9		NS

Interpretation

Hypotheses 4-6 suggest that subjects who report prior exposure to alcohol education will show gains in knowledge and positive attitudes, and decreases in negative attitudes when compared to subjects who report no such exposure. When comparing gains/losses between the two groups the only significant finding is that of a greater change in knowledge for those with no prior enrollment as compared with those with prior enrollment.

Even discounting test retest phenomena (i.e. just retaking the initial test might constitute an explanation for gains) the signficiant gain is a logical and predictable finding in that those who begin the course with little or no prior exposure to factual information about problem drinking would stand to show greater gains than those who begin the course with comparatively greater knowledge. The more

important findings may be the likelihood that attitudes are much more resistant to change even with prior exposures that might have impacted on attitudes. From this finding one might argue that "one shot" programs are unlikely to impact the attitudes of participants who have the advantage of additional exposure when compared to participants who do not. Further, there is no way to tell if the attitude changes reported in Table 4 are short term only and the findings reported in Table 5 suggest that long term comparisons should be incorporated into future studies to determine if any impact on attitude is lasting.

Hypotheses Concerning Effects of Reported History of Family/Self Drinking Problems on Knowledge and Attitudes

Table 6 shows effects of reported history of family drinking problems on knowledge and attitudes.

Table 6

Mean Gains/Losses in Knowledge and Attitudes by Whether Subjects Reported History of Family/Self Drinking Problems

Variable	No history drinking problem (n=16)	History drinking problem (n=17)	t	p
Change in knowledge	6.75	5.29	1.01	NS
Change in negative attitudes	0.6	0.05	0.73	NS
Change in positive attitudes	3.8	1.8	1.62	NS

Interpretation

Hypotheses 7-9 suggest that subjects who report family history of drinking problems will show less of a change in knowledge and attitudes than subjects who do not. This table shows that there was no difference in knowledge, positive and negative attitude change in both groups. This finding suggests that close exposure to persons with drinking problems with this group of participants does not have any significant effect on knowledge or attitudes.

Hypothesis Concerning Effects of Program on Ability to Identify Classroom Behaviors Related to Problem Drinking

Table 7 shows the effects of the program on participant's ability to identify the wide variance in classroom behaviors exhibited by offspring of problem drinkers and problem drinkers themselves. Although this variable is a knowledge one, an attempt was made to operationalize the concept of a wide range of "clue" behaviors to which teachers should react, in items 16-19. Thus, the effects of the program on this set of items alone were selected for separate analysis.

Table 7

Program Effects on Teacher Ability to Identify Variance in Classroom Behaviors Related to Problem Drinking (n=33)

Variable	Pretest $\bar{X}$	Posttest $\bar{Y}$	Gain (+) or Loss (-)	t	p
Classroom behaviors related to problem drinking (Items 16-19 combined: overachieving, shyness/withdrawal, acting out, rebellion)	4.15	4.69	0.15	2.36	<.03

Interpretation

Hypotheses 10 states that all subjects enrolled in the program will gain in their ability to identify the range of classroom behaviors exhibited by offspring of alcoholics.

Teachers gained to a significant degree in their ability to identify the wide variance in behaviors offspring of problem drinkers or problem drinkers themselves might exhibit in the classroom. Thus, in addition to overall knowledge gains, i.e. general body of facts related to alcoholism, teacher participants gained in a knowledge area specifically related to their classroom experience. In this sense, the finding suggests significant gains in knowledge areas over and above the accumulation of general facts about problem drinking.

Hypotheses Concerning Effects of Age on Definition of Alcoholism as a Disease

Table 8 shows effects of age of participants on definition of alcoholism as a disease.

Table 8

Effects of Age on Definition of Alcoholism

Variable	All Participants (n=33)	Participants 40+ (n=15)	Participants 39 and under (n=18)	t	p
Definition Alcoholism	1.4			-1.18	NS
Definition Alcoholism		-0.33	1.00	2.03	<0.05

Interpretation

Hypotheses 11 states that all subjects will demonstrate a significant increase in the acceptance of the definition of alcoholism as a disease.

Hypotheses 12 states that the younger the participant (39 and under) the greater the change in the definition of alcoholism as a disease. This table shows that the younger the participant the greater the gain in defining alcoholism as a disease.

When the group is considered in aggregate (i.e. the entire group regardless of age) there is no such increase. This finding may be interpreted in one of two ways. If older individuals are less flexible in their thinking than younger

ones they may be resistant to the newer definition of alcoholism which classifies problem drinking as an illness. A second explanation may be that of conditioned response. For many years in American Society alcoholism was defined in terms of criminality rather than sickness. The longer exposure in time (by virtue of being older) to this concept may be the key factor in explaining this finding. Moreover, the effects of age on both willingness to assume responsibility for interracting with problem drinking in the classroom as well as knowledge change were found to be not significant. Teachers as a group might be assumed to have been socialized into helping roles as well as receptivity to new knowledge. Thus, the effects of age on these 2 variables is unlikely to be significant.

Hypotheses 2 suggests that the older the teacher the greater the change in all outcome measures. The effects of age on positive and negative attitudes of study participants were similarly not significant. This group tends to be, on the average, older than most. It would be of interest in future studies to compare a younger, on the average, population of teachers to an older one to see if these findings hold. A comparison of relatively inexperienced teachers (26 years of age and below) and more experienced ones (27-32, 33-38, etc.) might generate different findings.

Hypotheses Concerning Effects of Gender on Knowledge, Attitudes, Helping Behaviors (Accepting Responsibility for Intervention) and Definition of Alcoholism as a Disease

Table 9 shows the effects of gender on selected outcome variables. This analysis attempts to show that gender differences may provide an alternative explanation for gains.

Table 9

Effects of Gender on Knowledge, Attitudes, Accepting Responsibility for Intervention and Definition of Alcoholism as a Disease

Variable	Male (n=17)	Female (n=16)	t	p
Change in positive attitude	3.0	2.6	0.24	NS
Change in negative attitude	1.4	-0.81	3.39	<0.002
Change in knowledge	5.17	6.8	-1.19	NS
Change in responsibility	-0.11	0.18	-0.63	NS
Change in definition of alcoholism	0.17	0.62	-0.67	NS

Interpretation

Hypotheses 13-17 state that gender will account for changes in attitudes, knowledge, definition of alcoholism and assuming responsibility for early intervention in the study population. Findings in table 9 suggest that gender has no effect on these outcome variables with one notable

exception: males showed a greater change when compared with females in the program in respect to negative attitudes. It may be that females in this group are more willing to change those attitudes which might block helping behaviors in the classroom. The scale of negative attitudes is composed of 3 statements - one, where the impossibility of helping spouses who are alcoholics is stressed and two where teachers make authoritarian and labelling statements to the changes about classroom behaviors that are related to problem drinking. Female teachers in this group seem to be much more amenable to changing or softening these negative attitudes than males. This finding would be an interesting one to further explore in future studies as it may be necessary to devise more powerful instructional strategies to impact on negative attitudes for a mixed group of teachers even on a short term basis. One cannot discard the possibility that this finding is applicable to some specific attribute of female teachers in this selected group only. The possibility that gender alone may account for change in negative attitudes should be confirmed or rejected in further studies.

Summary, Conclusions, Recommendations

Introduction

The purpose of this study was to investigate the effects of a teacher training program in alcohol education on a self selected group of teachers employed by the Barnstable School System, Cape Cod, Massachusetts. This program was presented to a relatively stable population who were, on the average, older (39), tenured and employed in the system for 14 years. The teachers were required to enroll in this course as a component of the system's evaluation process. Thus, it was assumed, that at the outset the teachers in this group, considering their non-volunteer status, would be resistant to instruction and change. The study aimed to examine the effects (i.e. gains made by participants) of this program on knowledge and attitudes of program participants despite the constraints imposed by required attendance. A further intent of the study was to assess the effects of selected demographic variables such as age, sex, prior exposure to alcohol education on attitudes and knowledge related to program participation. The findings of the quasi experiment are summarized and discussed as follows. Program effects on the total population are first presented. Plausible alternative explanations of effects were largely centered on analysis of demographic variables' effects

on outcomes. Significant findings in respect to the effects of selected demographic variables are next presented and discussed. Results of the faculty evaluation are reported insofar as these data may account for the reactivity between teacher and students that effectively finally overcame resistance in the student population. Conclusions and recommendations for further study are discussed.

Summary of Findings

Findings in respect to program effects on knowledge and attitudes are as follows. All course participants (n=33) who participated in the study showed significant gains in positive attitudes and knowledge of alcoholism. For most participants (63% report no prior exposure to educational programs) the assumption is that this was a new exposure to much of the course information. In this context significant changes in knowledge could be regarded as at least a reflection of short term benefits from the educational program (see Table 4 for data analysis).

Participants who reported no prior exposure to alcohol education showed a significant gain in knowledge, a logical and predictable finding if one assumes that this group had a greater knowledge gap initially. The more important finding here (see Table 5) is that attitudes are much more resistant to change even with prior exposures that might have affected attitudes. From this finding one might conclude that one

time only programs will have little effect on attitudes and that repeated exposures over time are needed before any attitude change is likely.

The effects of reported history of family or self problem drinking were found to be not significant (see Table 6). Close exposure to persons with drinking problems with this group of participants had little effect on knowledge or attitudes.

Teachers gained significantly in their ability to identify classroom behaviors which might be related to problem drinking. The course did benefit the teachers in that early intervention is based on the ability to detect problems as soon as possible. Case finding is greatly enhanced if teachers make the possible connection between classroom behaviors of students and possible problem drinking at home or at school. Further this finding suggests significant gains in a specific knowledge area of importance to teachers.

All participants showed no significant gain in their definition of alcoholism as a disease. When age differences were examined participants under 39 years of age showed a significant gain in defining alcoholism as a disease. As was discussed under the interpretation of Table 8 this finding might suggest that older teachers were less flexible in their thinking than younger ones. Another possible interpretation

is that of conditioned response. Older participants had a longer exposure (in time, by virtue of being older) to the past definition of alcoholism as a criminal and culpable act to be punished rather than treated. Effects on attitudes examined in respect to age differences were not significant.

Males showed a significant increase in negative attitudes when compared to females (see Table 9). The importance of gender differences may be explored in future studies. One cannot discard the possibility that this finding is applicable to some specific attribute of female teachers in this selected group only. Female teachers in this group (see further explanation under Table 9) do seem to be more amenable to softening or changing negative attitudes than males. Considered in aggregate no such changes are noted in program participant attitudes. Thus, gender differences could be considered as possible explanations for attitude changes in further studies.

The faculty evaluation (see Appendix) results are summarized in that the students were unanimous in making positive comments about the faculty member. It may be that a less charismatic faculty member teaching the course would have accounted for little gains in a resistant population. Teacher reactivity then cannot be discounted as an important factor in the final changes reported in this study.

Conclusions

It is concluded that with this group of self selected study participants there were at least short term gains in knowledge accounted for by program effects. Further, greater gains of a short term nature were predictably achieved by participants who reported no prior enrollment in such programs. For this group, age seems to provide an alternative explanation for some gains. For example younger (under 39) teachers showed a significant gain in defining alcoholism as an illness. Gender provided an explanation for the only increase in negative attitudes noted where males showed a significant increase in negative attitudes when compared to females. Other demographic variables were analyzed. These included occupational level of teachers (junior high and elementary compared to high school teacher) and parents of children in a high risk group (age 10-19) for drinking problem. Findings in this data analysis were not significant.

All participants benefitted from the program in that they gained significantly in their ability to identify classroom behaviors that might be clues to problem drinking at home.

Finally, it is concluded that the faculty member who was unanimously favorably received and evaluated by course participants may have broken down and neutralized the effects

of the group's required enrollment in the course. A less charismatic teacher might have diminished reactivity and success (in terms of gains) in the program.

Recommendations

Future studies of alcohol education program effects should include, as with this one, possible teacher student reactivity effects.

A better design, that of the pretest/posttest experiment with participants randomly assigned to an experimental and control group is advisable for future studies.

A further exploration of demographic variables as alternative plausible explanations for gains is recommended for future studies.

A replication of this study with improved design and control features is recommended.

A further study of long term effects of this and similar programs is recommended to remedy the lack of longitudinal studies of lasting effects on knowledge and attitudes.

The development of psychometric scales that reliably reflect positive and negative attitudes should be expanded in future studies. Attitudes are most difficult to measure and assess in such program evaluations. But changes in attitudes may be far more important than changes in

factual knowledge. Thus every effort should be made to focus on measuring attitude change as much as the more easily measured knowledge effects.

Future studies should incorporate sufficient process evaluation to assure that the program is being conducted as intended and to monitor program implementation in an effort to provide explanations of program effects.

APPENDIX

APPENDIX

A - Informed Consent Form

B - Instrument

C - Faculty Evaluation Form

D - Code Book for Data Analysis

Directions: Please read and sign final statement if you decide to participate in study.

INFORMED CONSENT FORM

Purpose and Principal Investigator

A study is being conducted at the request of the Barnstable School System to assess the effects of this in-service education program. The program participants will be granted three graduate credits from Bridgewater State College for successful completion of the program. Dr. Genevieve Fitzpatrick, a faculty member at Bridgewater State College, has agreed to conduct the study. Should you have any questions about the study, she may be reached at the college - 697-1200 ext. 2055 and will be happy to respond and clarify as needed. Her address is Kelly Gym, Health, Physical Education and Recreation Department, Bridgewater State College, Bridgewater, MA 02324.

Questions to be asked

You will be asked some background information about yourself such as age, occupation and social history. You will be asked other questions about the nature of alcoholism and its treatment. You may omit any questions you do not wish to answer or decide not to participate in the study without affecting your status in this educational program.

Time needed to complete the questionnaire

It takes no longer than one half hour to complete this questionnaire.

Conditions of participation

You may discontinue participation in the study at any time with no problem to you. You will be asked to take a pretest before the course begins and a posttest of similar length at the close of the course. The course will be taught and you will participate in it exactly as it would have been without this study. All data collected in this study will be handled in such a way that no individual participants are identified.

SHOULD YOU DECIDE TO PARTICIPATE IN THE STUDY, A COPY OF THE FINAL SUMMARY WILL BE MAILED TO YOU AS SOON AS COMPLETED. NOW, PLEASE SIGN BELOW AND TURN TO THE QUESTIONNAIRE FOR COMPLETION ACCORDING TO DIRECTIONS.

==========

I have read and understand the above statement. I understand the terms of my participation in the study. I will participate in the study as a volunteer for the period specified.

Date: _____

Signature of Participant: _____

Witness Signature: _____

Signature of Principal Investigator: Genevieve Fitzpatrick
Genevieve Fitzpatrick, R.N., Ph.D.

Copies of signed forms will be mailed to each participant.

ALCOHOL EDUCATION PROJECT*

ALCOHOL EDUCATION PROGRAM SURVEY

Please sign or print your name below. Also, state your occupation (teacher, administrator, counsellor, other) and the date and address where you may be contacted.*

NOTE: If you wish, you may remove this top sheet at the time you complete the questionnaire.

Name of Program Participant: _____

Occupation of Program Participant: _____

Date: _____

Address: _____

*Only Dr. Genevieve Fitzpatrick has the master list of names. This list with code numbers assigned is kept locked up in a special file at Bridgewater State College during the study. If you did not state your address on pretest and wish to receive a summary report, please supply address.

A code number appears on this second questionnaire. All data collected in the study will be presented in such a way that individuals who complete the questionnaire cannot be identified.

You may choose to complete the total questionnaire, parts of it, or none of it without affecting your status in this alcohol education program. No individual responses to questions will be identified.

In words, the data will be analyzed and reported in aggregate form. Results will be used to improve and strengthen the in-service educational program.

A special word of thanks to all participants for your cooperation with the study. A summary report will be mailed to you within the next month. If you should need any further information, do not hesitate to contact me at the college - 697-1200 x 2055.

Cordially,

Genevieve Fitzpatrick

Genevieve Fitzpatrick

GF/b
Encl.
*Except for cover page, pretest/posttest are exactly the same.

Code #_____

Posttest_____

ALCOHOL EDUCATION SURVEY

Purposes: You have been enrolled in a graduate credit course in alcohol education. The purpose of this survey is to collect information that will help the school system improve this educational offering. An additional purpose is to identify the present strengths of the program you experience. Your response will be held in strict confidence.

Section I

Directions: Read each question carefully. Check the answers in spaces provided. Complete all items.

We would like to know what you think about these statements. For each statement, place a check in the response space to the right of the question that comes closest to the way you feel. Please answer every item.

SA = Strongly Agree
A = Agree
U = Undecided
D = Disagree
SD - Strongly Disagree

I.1	Alcoholism affects only the person who has the disease.	SA A U D SD
I.2	Alcoholism is a progressive disease of the whole person.	SA A U D SD
I.3	There is controversy over whether or not there is a definable biological predisposition to alcoholism in families.	SA A U D SD
I.4	There are several recognizable stages to alcoholism.	SA A U D SD
I.5	The earliest stage of alcoholism is physiological addiction.	SA A U D SD
I.6	Problem drinkers tend to have problems in all areas of their lives.	SA A U D SD
I.7	Chemical dependency is a progressive reliance on a substance.	SA A U D SD

I.8	Any drinker may be come an alcoholic.	SA A U D SD
I.9	Alcoholic drinks such as beer, wine, rum, whiskey, dull the power of self judgement.	SA A U D SD
I.10	Alcoholism is an inherited disease.	SA A U D SD
I.11	Alcohol aids the digestion of food.	SA A U D SD
I.12	One who drinks moderately takes very little risk.	SA A U D SD
I.13	Drivers see less clearly and react more slowly after drinking.	SA A U D SD
I.14	If I had a drinking problem, I would be aware of it.	SA A U D SD
I.15	A small amount of alcohol in the body makes most people safe drivers.	SA A U D SD
I.16	Children of alcoholics tend to be over-achievers.	SA A U D SD
I.17	Children of alcoholics tend to be overly shy.	SA A U D SD
I.18	Children of alcoholics tend to be highly distracting (they "act out" a lot in the classroom).	SA A U D SD
I.19	Children of alcoholics tend to be rebellious.	SA A U D SD
I.20	Alcoholism is best treated after the disease has progressed.	SA A U D SD
I.21	Alcoholism in one family member affects the whole family system.	SA A U D SD
I.22	Problem drinking can be prevented.	SA A U D SD
I.23	It is unlikely that any teacher can have a significant impact on a child who has or is living with a drinking problem.	SA A U D SD
I.24	Alcohol is a depressant drug.	SA A U D SD

I.25	Science has shown that alcohol is classified as a necessary food.	SA A U D SD
I.26	The moderate drinker may become a problem drinker.	SA A U D SD
I.27	Most employers prefer to hire people who do not drink.	SA A U D SD
I.28	If I had a drinking problem, I would seek help from my employer.	SA A U D SD
I.29	There are sufficient resources in the school system where I work to deal with problems of youth and alcohol.	SA A U D SD
I.30	Industry in general tends to discharge alcoholic employees.	SA A U D SD

Section II

Directions: For this part of Section II, fill in the spaces with information requested or check statement that applies.

II.31 a. I have _____ have not _____ enrolled in an alcohol education program before February, 1983. If you checked have, please answer the following:

b. The program lasted _____ hrs _____ days _____ weeks.

c. The program I attended was in month _____ 19____.

d. The program I attended was conducted by my school system _____ a college _____ other _____ (please specify).

II.32 a. I would say I have _____ have not_____ read extensively about alcoholism/drinking problems.

b. If you checked have, please specify types of materials read below by checking or filling in:

Professional Journals _____

Books by Professionals _____

Non-Professional Journals _____

Books by Non-Professionals _____

Newspapers _____

Other (please specify) (Include any media such as watching TV specials or listening to radio programs). _____

Section III

Directions: The following section deals with the treatment of problem drinking. Please indicate whether you agree or disagree by placing an A for agree or a D for disagree next to each statement in spaces provided.

III.33 The spouse of an alcoholic is powerless to help his or her mate. _____

III.34 Help from outside agencies is available for the spouse of an alcoholic. _____

III.35 You cannot help an alcoholic until he/she "hits bottom". _____

III.36 It is possible to identify a problem drinker early. _____

III.37 It is possible to bring about early recovery from problem drinking. _____

III.38 The earlier problem drinking is identified, the better the chances for recovery. _____

III.39 Early intervention is the basis for successful alcoholism treatment programs. _____

III.40 The success rate of programs like AA is very low. _____

Section IV

Directions: Assume you have noticed a student in your classroom who has a drinking problem. Please place an A next to statements you agree with and a D next to statements you disagree with in spaces provided.

IV.41 I cannot respond to further questions about this case as I feel it is not my responsibility in my position to respond to such problems. ____

If you have agreed with this statement, please omit statements 42 through 47 and go on to Section V. If you disagreed with statement 41, please indicate your agreement or disagreement with the following sample statements you might make to the student. If you think you might respond this way, put an A in space provided. If you think you would not respond this way, put a D in space provided.

IV.42 "I am really concerned about your behavior. I think you might have a drinking problem". ____

IV.43 "This is not acceptable behavior in my classroom". ____

IV.44 "Why are you acting this way? No one else in the classroom behaves as you do". ____

IV.45 "I want you to know that this problem happens to a lot of people and I am willing to help you", ____

IV.46 "Because I'm really concerned about you, I will refer you to a place for appropriate help". ____

IV.47 "I will keep in touch with you to see how you are doing after we get some help for you". ____

Section V

Directions: Please answer all questions in this section. Fill in blanks. Check or circle statement that fits you best.

V.48 I am ____ years old.

V.49 I am male _____
female _____

V.50 I am employed as _____
(If teacher, state grade level of teaching).
(State occupation).

V.51 I have been employed in the same or similar positions _____ years.

V.52 Check the highest degree held.

Baccalaureate _____

Master's level _____

Post Master's _____

Doctorate _____

V.53 I am married _____ single _____ divorced _____ widowed _____

separated _____

V.54 a. I have _____ children.

b. My children's ages are _____, _____, _____, _____, _____, _____.

V.55 I have _____ have not _____ had a drinking problem.

V.56 I am _____ am not _____ a recovered problem drinker.

V.57 The following members of my family have had a drinking problem. (Check all that apply).

No one	_____	Cousins (specify #)	_____
Great grandmother	_____	Mother	_____
Great grandfather	_____	Father	_____
Grandfather	_____	Self	_____
Grandmother	_____	Children (specify#)	_____
Uncles (specify #)	_____	Spouse	_____
Aunts (specify #)	_____	Other	_____

V.58 Have you or any of your immediate family had: (Check all that apply). Put "S" for self and "O" for family members.

Lower back problems _____

Cancer _____

Heart Disease _____

Stroke _____

Cirrhosis of Liver _____

Acute Gastritis _____

Pancreatitis _____

Stomach Ulcers _____

Intestinal Ulcers _____

This concludes the final questionnaire. Thank you for your help!

State any additional comments about your experience in this program you wish to share with us below.

PROGRAM OF GRADUATE AND CONTINUING EDUCATION
BRIDGEWATER STATE COLLEGE
STUDENT INSTRUCTIONAL RATING FORM

Instructor's Name _____

Course Number _____ Date _____

THIS IS AN OPPORTUNITY FOR YOU TO EVALUATE THIS CLASS AND ITS INSTRUCTOR. PLEASE KEEP IN MIND THAT THIS IS A SERIOUS MATTER WHICH GIVES EACH OF YOU A CHANCE TO EXPRESS A THOUGHTFUL OPINION. THE RESULTS WILL HELP THE INSTRUCTOR AS WELL AS THE APPROPRIATE DEANS AND GRADUATE COORDINATORS IN RECOMMENDING INSTRUCTORS FOR APPOINTMENTS TO THE PROGRAM OF GRADUATE AND CONTINUING EDUCATION. THE RESULTS WILL BE PLACED IN AN APPROPRIATE FILE AND KEPT IN THE OFFICE OF THE DEAN. YOUR RESPONSE WILL BE APPRECIATED.

Every instructor in the Program of Continuing Education will be evaluated by students before the end of each term and the following procedures will be followed in administering the evaluation form for purposes of obtaining student evaluations.

a. No person will administer this form to his own classes. The form will be administered by the Dean or his disignee at a time arranged with the instructor concerned.

b. The person administering the evaluation forms will distribute them to the students, and collect them after they are completed. Instructors will not see them until grades have been submitted.

c. The person administering the evaluation will, at the time of the administration, note (1) class enrollment and (2) the number of evaluation forms returned by the students.

d. The instructor will not be present during the evaluation process.

e. The completed evaluation forms will be returned to the Dean, who will keep them until after the instructor has submitted final grades for his classes.

A. What is your present status? undergraduate_____, graduate_____

B. Are you presently matriculated in a degree or certificate program? ( )yes ( )no

C. Select the most appropriate alternative response.

1. Was this course required in your degree or certificate program? ( )yes ( )no
2. Was this course recommended to you by another student? ( )yes ( )no
3. Would you recommend this course to another student? ( )yes ( )no
4. Do you feel the course challenged you intellectually? ( )yes ( )no
5. Have you become more competent in this area due to the course? ( )yes ( )no
6. If you are employed in a professional role, has this course increased your professional competence? ( )yes ( )no
7. Did the instructor encourage students to express opinions? ( )yes ( )no
8. Did the instructor generally stimulate class discussion? ( )yes ( )no
9. Was the course well organized? ( )yes ( )no
10. Did the instructor grade and return assignments and examinations within a reasonable time? ( )yes ( )no
11. Was the instructor receptive to new ideas and other's viewpoints? ( )yes ( )no
12. Please feel free to make any comments.

36 teachers enrolled in course completed the form + wrote in favorable comments – 36 made "yes" responses deemed favorable

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Page 1 only shows scales

CODE BOOK ALCOHOL IN-SERVICE EDUCATION STUDY

Column		Variable Description	Code
1, 2		ID#	01-37
3		Pretest, posttest 0=Strongly Agree 1=Disagree 2=Undecided 3=Agree 4=Strongly Agree 9=No Response	1=pretest 2=posttest
4	I.1	Alcoholism affects only one person	I.1 thru I.30 coded this way
5	I.2	Alcoholism progressive disease that affects whole person	
6	I.3	Controversy about biological predisposition to alcoholism	0-9 as above for all items I.1 thru I.30
7	I.4	There are stages to alcoholism (knowledge)	
8	I.5	Knowledge of each stage	
9	I.6	Alcoholism problems pervasive in life of alcoholic	
10	I.7	Definition chemical dependency	
11	I.8	Knowledge of alcoholism potential of all drinkers	
12	I.9	Knowledge of effects of alcohol	
13	I.10	Knowledge of nature of alcoholism	
		Note: All outcome variables are listed below.	Note: Final positive attitude scale includes 5 items: III37, IV42, IV45 IV46, IV47
		*Positive attitude items I 14,28 III 34,36,37,38,39 IV 42,45,46,47	
		Negative attitude items I 30 III 33,35,40 IV 43,44	Note: Final negative attitude scale includes 3 items: III33, IV43, IV44
		Knowledge items I 1,3,6,7,8,9,11,12,13,15,16,17,18,19,21, 22,24,25,26,27,29	
		Responsibility for intervention I 23 IV 41	
		Definition of alcoholism as a disease I 2,4,5,10,20	

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